

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/000646

| | | |
|---|--|---|
| A. CLASSIFICATION OF SUBJECT MATTER G05B19/4099 G05B19/42 | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) G05B | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | |
| Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X A | EP 1 151 778 A (SANYO ELECTRIC CO., LTD) 7 November 2001 (2001-11-07) paragraph [0001] - paragraph [0023] paragraph [0039] - paragraph [0072] paragraph [0119] - paragraph [0150] paragraph [0178] - paragraph [0181] paragraph [0195] - paragraph [0204] paragraph [0217] - paragraph [0246] figures 1,2,4,10-13,20-24 ----- | 1,10 3-9 |
| X A | US 5 487 012 A (TOPHOLM ET AL) 23 January 1996 (1996-01-23) column 2, lines 44-63 column 4, line 4 - column 8, line 61 figures 3-11 ----- | 10 1,3-9 |
| ----- -/-- | | |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex. | | |
| * Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed </div> <div style="width: 45%;"> *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art *Z* document member of the same patent family </div> </div> | | |
| Date of the actual completion of the international search | Date of mailing of the international search report | |
| 15 March 2006 | 22/03/2006 | |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016 | | Authorized officer Orobitg Oriola, R |

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/000646

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | DE 101 32 226 A1 (KPV AG, BERN) 16 January 2003 (2003-01-16) | 10 |
| A | paragraph [0008] - paragraph [0016] paragraph [0027] paragraph [0034] - paragraph [0040] claims 1,12,13,17 figures 1,3 | 1,3-8 |
| A | EP 0 163 076 A (KAWASAKI JUKOGYO KABUSHIKI KAISHA) 4 December 1985 (1985-12-04) page 2, line 31 - page 3, line 21 page 4, line 55 - page 5, line 40 claim 1; figures 1,2 | 1,4-8,10 |
| A | EP 0 348 247 A (KREON INGENIERIE MARKETING) 27 December 1989 (1989-12-27) page 2, lines 5-22 page 2, line 63 - page 3, line 65 page 4, line 52 - page 6, line 53 figures 2,3 | 1,2,4,5, 10 |
| A | US 4 001 069 A (DIMATTEO ET AL) 4 January 1977 (1977-01-04) column 1, lines 46-63 column 2, line 35 - column 5, line 36 figures 1,5-10 | 1,6-10 |
| A | US 5 793 015 A (WALCZYK ET AL) 11 August 1998 (1998-08-11) column 2, line 20 - column 3, line 40 column 8, line 65 - column 9, line 10 figures 1-6 | 1,6-10 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/000646

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|----|---------------------|--|--|
| EP 1151778 | A | 07-11-2001 | WO 0048699 A1 JP 2001166809 A | 24-08-2000 22-06-2001 |
| US 5487012 | A | 23-01-1996 | NONE | |
| DE 10132226 | A1 | 16-01-2003 | NONE | |
| EP 0163076 | A | 04-12-1985 | CA 1257682 A1 DE 3584642 D1 US 4752964 A | 18-07-1989 19-12-1991 21-06-1988 |
| EP 0348247 | A | 27-12-1989 | CA 1328913 C FR 2629198 A1 WO 8909378 A1 | 26-04-1994 29-09-1989 05-10-1989 |
| US 4001069 | A | 04-01-1977 | NONE | |
| US 5793015 | A | 11-08-1998 | WO 9508416 A1 | 30-03-1995 |